Remarks/Arguments

The Office has stated that the oath or declaration is defective because (1) it does not identify the citizenship of one of the inventors, Giai Do, and (2) it does not state that the acknowledgment of the duty to disclose information which is material to the examination is in accordance with 37 CFR 1.56. Accordingly, a new declaration and a petition for approval thereof identifying the citizenship of inventor Giai Do, and stating that the acknowledgment of the duty to disclose information material to examination is in accordance with 37 CFR 1.56 has been filed with the Office.

Regarding the specification, the Office has suggested that the title of the invention is not indicative of the invention to which the claims are directed. Additionally, the Office has objected to the text of the specification because referenced trademarks are not properly capitalized or designated with an appropriate symbol, and are not accompanied with appropriate generic terminology describing the context in which the trademark is used. Amendments to the specification are, therefore, enclosed with this paper addressing these concerns.

Regarding the claims, the Office has rejected claims 6 and 21 under 35 U.S.C. § 112, first paragraph as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, the Office states that the limitation "transmitting the graph in connection with email" is nowhere described in the specification.

The Office has also rejected claims 13-21 under 35 U.S.C. § 101 because the Office suggests the claimed invention is directed to non-statutory subject matter.

Additionally, the Office has rejected claims 1-4 and 7-20 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,477,538 to Yaginuma et al.

Amendments to the Drawings

In the subject action the Office has noted that the application was filed with informal drawings for Figures 4 and 5, and that formal copies of the same will be required when the application is allowed. As a result, a complete set of formal drawings, replacing the most recent set of record, is included in Appendix A of this paper in advance of the application being allowed. Two duplicate copies of the enclosed drawing sheets are provided for the convenience of the Office.

Finally, the Office has rejected claims 5, 6 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Yaginuma as applied to the base and intervening claims.

Rejections Under 35 U.S.C. § 112, First Paragraph

The Office has rejected claims 6 and 21 under 35 U.S.C. § 112, first paragraph, stating that the limitation "transmitting the graph in connection with email" is not recited in the specification. However, in an exemplary embodiment discussed in paragraph [033] of the specification, Applicants state that "[i]n step 208, an administrator is able to publish graphs to a web site, for example, . . . , *and/or transmit graphs via e-mail*" thereby reciting the noted limitation (emphasis added). Further, step 208 of Figure 2 recites "Publish Graphs to Website and Email," thereby also reciting the noted limitation and addressing the Office's concern.

Rejections Under 35 U.S.C. § 101

The Office has rejected claims 13-21 under 35 U.S.C. § 101 as being directed to non-statutory subject matter, stating that system components recited in claim 13, including the database and the graph generator, are "merely software components" and/or "non-functional descriptive material" not entitled to patent protection. However, the system recited by Applicants in claim 13, as currently amended, comprises a "database to store a data set, at least one best-fit rule, and at least one graph type encoded on a computer readable medium." As such, the system components are not merely software components, but comprise computer hardware components encoded with the requisite software. Further, the material stored which, in addition to a data set includes "at least one best-fit rule, and at least one graph type" is functional descriptive material *per se* as it imparts functionality to the system through the automatic generation of a best-fit graph from the data set based on application of a best-fit rule. As the claimed system components include functional descriptive material encoded on computer-readable medium, claim 13 and its dependents are statutory under 35 U.S.C. § 101 (*see, e.g.,* MPEP § 2106 (IV)(B)(1)).

The § 102(e) Rejection in view of Yaginuma

Yaginuma teaches the display of multi-dimensional data and the results of various data mining processes thereon in a "common graph" of "predetermined format" (*see, e.g.,* Yaginuma, col. 2, lines 20-43). Yaginuma's use of a common, predetermined graph format is distinctly different from, and in no way suggestive of, the generation of a "best-fit graph" on the basis of the application of a "best-fit rule" to a data set, as required by Applicants' claim 1, as currently amended.

Further, while Yaginuma uses the word "rule," it is in the context of the application of known data mining techniques, such as association rules, to a data set. In association rule mining, the rule is developed *from* the mining of the data set in order to identify frequently occurring patterns. Such use is distinctly different from, and in no way suggestive of, the application of a "best-fit rule" *to* a data set as required by Applicants' claim 1, as currently amended, to automatically generate a "best-fit graph" from a selected data source "based on the data set and best-fit rule applied." Therefore, as Yaginuma does not show or even suggest all the elements of Applicants' claim 1, claim 1, and claims 2 through 12, which depend from claim 1, are patentable.

Similarly, Yaginuma does not teach or suggest "a graph generator selectively applying at least one best-fit rule and graph type to [a] data set to generate at least one best-fit graph" as required by Applicants' claim 13. Rather, as noted above, Yaginuma teaches "displaying the result of an association rule generation" (*see, e.g.,* Yaginuma, col. 15, lines 13-14), which neither teaches nor suggests application of a best-fit rule to a data set to generate at least one best-fit graph. Thus, as Yaginuma neither teaches nor suggests all the limitations of Applicants' claim 13, this claim and its dependents all are patentable over Yaginuma.

The 103(a) Rejections over Yaginuma

As discussed above, Yaginuma does not teach or even suggest "generating at least one best-fit graph based on the data set and best-fit rule applied" as required by Applicants' claim 1. Rather, Yaginuma teaches plotting the result of data mining processes, such as association rules, in a common, *predetermined* graph format (*see, e.g.,* Yaginuma, col. 2, lines 20-43). This approach is wholly inconsistent with, and teaches away from Applicants' claim 1 in which a best-fit rule is applied to a data set to generate a best-fit graph for the data set based on the applied best-fit rule. Thus, as Yaginuma neither teaches nor suggests the limitations of Applicants' claim 1, claim 1 and its dependents, including claims 5 and 6, are patentable.

For the same reasons it is seen that Yaginuma does not teach or even suggest applying a best-fit rule to a data set to generate a best-fit graph as required by Applicants' claim 13. Therefore, claim 13, and claims 14 through 21 which depend from claim 13, are patentable over Yaginuma.
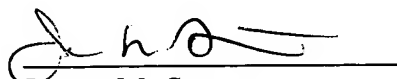
Conclusions

Applicants have, under separate cover, petitioned the Office for approval of a new declaration addressing the noted deficiencies in the original. In addition, Applicants have enclosed a compete set of formal drawings with this paper, and have accepted the Office's suggestion and amended the title of the invention as proposed. Further, Applicants have amended the specification to properly reflect their use of trademarks therein.

Regarding the claims, Applicants have traversed the Office's 35 U.S.C. § 112 and 101 rejections, and 102(e) and 103(a) rejections over Yaginuma. As such, all of Applicants' claims are patentable over this reference.

In light of the above, Applicants ask the Office to reconsider this application and to allow all of the claims. Please apply any charges that might be due, excepting the issue fee but including fees for extensions of time, to deposit account 14-0225.

Respectfully,

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